

IN THE CLAIMS:

Please cancel claims 1-12.

Please amend claims 13-22 as follows:

13. (Twice Amended) The [injection device] system for treating an intervertebral disk as defined in claim [4] 24, wherein said [heater] heating element heats said thermoplastic material for flowing at a temperature between about 150C and 200C.

14. (Twice Amended) The [injection device] system for treating an intervertebral disk as defined in claim [4] 24, wherein said thermoplastic material comprises a linear crystalline polymer.

15. (Twice Amended) The [injection device] system for treating an intervertebral disk as defined in claim [4] 24, wherein said thermoplastic material comprises a gutta percha compound in which gutta percha is between 15% and 40% by weight of the compound.

16. (Twice Amended) The [injection device] system for treating an intervertebral disk as defined in claim [4] 24, wherein said injection needle is formed of a ceramic material.

17. (Twice Amended) The [injection device] system for treating an intervertebral disk as defined in claim [4] 24, further comprising:

an expandable sleeve about said needle adjacent an extending end of said needle to define an annulus between said needle and said sleeve, so that pressurized fluid communicating with the annulus expands said sleeve outwardly.

18. (Amended) The [injection device] system for treating an intervertebral disk as defined in claim 17, wherein said needle has openings thereon for the supply of a pressurized fluid to said annulus for expanding said sleeve.

19. (Twice Amended) The [injection device] system for treating an intervertebral disk as defined in claim [4] 24, further comprising:

a piston adjacent an end of said [plug] thermoplastic material for exerting a force against said [plug] thermoplastic material; and

a hand operated trigger [is] operatively connected to said piston and upon actuation [is] effective to force said thermoplastic material from said needle when said thermoplastic material is heated to a flowing state.

20. (Twice Amended) The [injection device] system for treating an intervertebral disk as defined in claim [4] 24, further comprising[;]:

a hand operated trigger operatively connected to said [plug] thermoplastic material and upon actuation [is] effective to force said thermoplastic material from said needle when said thermoplastic material is heated to a flowing state.

21. (Twice Amended) The [injection device] system for treating an intervertebral disk as defined in claim [4] 20, [further comprising:] wherein:

[the] said chamber for receiving [the plug] said thermoplastic material is provided in a plunger removable from an injection device body.

22. (Twice Amended) The [injection device] system for treating an intervertebral disk as defined in claim [4] 24, further comprising[;]:

a [heater] heating element control unit having an adjustable temperature control to provide a selected temperature for said [heater] heating element.

Please add new claims 23 and 24 as follows:

23. (New) The system for treating an intervertebral disk as defined in claim 24, wherein said thermoplastic material comprises a geometric isomer of natural rubber.

24. (New) A system for treating an intervertebral disk, comprising:

a thermoplastic material capable of being heated to a flowable state at a predetermined temperature above body temperature for introduction into an intervertebral disk and thereafter cooling to return to a non-flowable state; and

an injection device having a chamber for receiving said thermoplastic material, a heating element for heating said thermoplastic material to said flowable state, and a needle for injecting said flowable thermoplastic material into an intervertebral disk of a patient.